

CURRICULUM VITAE
The Johns Hopkins University School of Medicine

ARTHUR LOUIS (BUD) BURNETT, II, M.D., F.A.C.S.

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DEMOGRAPHIC INFORMATION

Current Appointments:

Associate Professor, Department of Urology, Johns Hopkins University School of Medicine,
Active Staff of Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, Baltimore, MD.

Director, Basic Science Laboratory in Neurourology, Johns Hopkins University School of Medicine,
Baltimore, MD

Director, Male Consultation Clinic, Johns Hopkins Hospital, Baltimore, MD

Personal Data:

Clinical/Research:

The James Buchanan Brady Urological Institute
The Johns Hopkins Hospital
600 N. Wolfe Street
407 Marburg Building
Baltimore, Maryland 21287-2411

Clinical:

Department of Urology
The Johns Hopkins Bayview Medical Center
4940 Eastern Avenue
Baltimore, Maryland 21224

Education And Training:

	<u>Degrees/Year</u>	<u>Institution</u>	<u>Discipline</u>
• Undergraduate:	A.B./1984.	Princeton University	Biology
• Doctoral/graduate:	M.D./1988.	Johns Hopkins University School of Medicine	Medicine
• Postdoctoral:	Intern/1988-89 Residency/1989-90 Residency/1990-93	Johns Hopkins Hospital Johns Hopkins Hospital Johns Hopkins Hospital	Surgery Surgery Urology

Fellowship/1993-94
Fellowship/1994-96

Johns Hopkins Hospital
Johns Hopkins Hospital

Urology
Reconstructive Urology

Professional Experience:

<u>Positions</u>	<u>Institutions</u>	<u>Dates</u>
• Instructor, Urology	Johns Hopkins University School of Medicine, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, Baltimore, MD	1994-1996 Department of
• Assistant Professor, Urology	Johns Hopkins University School of Medicine, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, Baltimore, MD	1996-1998 Department of
• Associate Professor, of Urology	Johns Hopkins University School of Medicine, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, Baltimore, MD	1998-Present Department

RESEARCH ACTIVITIES

Publications:

- Peer-reviewed scientific articles
 1. Takahashi, L.K., Lisk, R.D., **Burnett, A.L. II**: "Dual Estradiol Action in Diencephalon and the Regulation of Socio-sexual Behavior in Female Golden Hamsters." Brain Res., 359 (1985),194-207.
 2. Berrettini, W.H., Bardakjian, J., Cappelari, C.B., **Burnett, A.L. Jr.**, Albright, A.,Nurnberger, J.I., Gershon, E. S.: " Skin Fibroblast Beta-Adrenergic Receptor Function in Manic-Depressive Illness." Biol. Psychiatry, 22 (1987),1439-43.
 3. **Burnett, A.L.**, Epstein, J.I., Marshall, F.F.: "Radical Cystectomy for Transitional Cell Carcinoma of the Bladder: Long Term Survival in High Risk Patients." Eur. Urol., 15 (1988), 171-5.
 4. **Burnett, A.L.**, Epstein, J.I., Marshall, F.F.: "Adenocarcinoma of Urinary Bladder: Classification and Management." Urology, 37,4 (1991),315-21.
 5. **Burnett, A.L.**, Lowenstein, C.J., Bredt, D.S., Chang, T.S.K., Snyder, S.H.: "Nitric Oxide: A Physiologic Mediator of Penile Erection." Science, 257 (1992), 401-3.
 6. **Burnett, A.L.**, Chan, D.W., Brendler, C.B., Walsh, P.C.: "The Value of Enzymatic Acid Phosphatase in the Staging of Localized Prostate Cancer." J. Urol., 48 (1992), 1832-4.
 7. **Burnett, A.L.**, Tillman, S.L., Chang, T.S.K., Epstein, J.I., Lowenstein, C.J., Bredt, D.S., Snyder, S.H., Walsh, P.C.: "Immunohistochemical Localization of Nitric Oxide Synthase in the Autonomic Innervation of the Human Penis." J. Urol., 150 (1993), 73 -6.
 8. **Burnett, A.L.**, Epstein, J.I., Gearhart, J.P.: "Spectrum of Differentiation in Pediatric Epithelial Tumors

of Kidney: Report of Two Cases." *Urology*, 42,1 (1993), 93-8.

9. Steiner, M.S., **Burnett, A.L.**, Brooks, J.D., Brendler, C.B., Stutzman, R.E., Carter, H.B.: "Tubularized Neourethra Following Radical Retropubic Prostatectomy." *J. Urol.*, 150(1993), 407-10.
10. **Burnett, A.L.**, Brendler, C.B.: "Femoral Neuropathy Following Major Pelvic Surgery: Etiology and Prevention." *J. Urol.*, 151 (1994), 163 -5.
11. **Burnett, A.L.**, Ricker, D.D., Chamness, S.L., Maguire, M.P., Crone, J.K., Bredt, D.S., Snyder, S.H., Chang, T. S.K.: "Localization of Nitric Oxide Synthase in the Reproductive Organs of the Male Rat." *Biol. Reprod.*, 52 (1995), 1-7.
12. **Burnett, A.L.**, Saito, S., Maguire, M.P., Yamaguchi, H., Chang, T.S.K., Hanley, D.F.: "Localization of Nitric Oxide Synthase in Spinal Nuclei Innervating Pelvic Ganglia." *J. Urol.*, 153 (1995), 212-7.
13. Gearhart, J.P., **Burnett, A.L.**, Owen, J.H.: "Measurement of Pudendal Evoked Potentials During Feminizing Genitoplasty: Technique and Applications." *J. Urol.*, 153 (1995), 486-7.
14. **Burnett, A.L.**: "The Role of Nitric Oxide in the Physiology of Erection." *Biol. Reprod.*, 52 (1995), 485-9.
15. **Burnett, A.L.**, Maguire, M.P., Chamness, S.L., Ricker, D.D., Takeda, M., Lepor, H., Chang, T. S.K.: "Characterization and Localization of Nitric Oxide Synthase in the Human Prostate." *Urology*, 45,3 (1995), 435-9.
16. Takeda, M., Tang, R., Shapiro, E., **Burnett, A.L.**, Lepor, H.: "Effects of Nitric Oxide on Human and Canine Prostates." *Urology*, 45,3 (1995), 440-6.
17. **Burnett, A.L.**, Allen, R.P., Tempany, C.M., Dover, G.J., Brendler, C.B.: "Evaluation of Erectile Function in Men with Sickle Cell Disease." *Urology*, 45,4 (1995), 657-63.
18. Chamness, S.L., Ricker, D.D., Crone, J.K., Dembeck, C.L., Maguire, M.P., **Burnett, A.L.**, Chang, T. S.K.: "The Effect of Androgen on Nitric Oxide Synthase in the Male Reproductive Tract of the Rat." *Fertil. Steril.*, 63,5 (1995), 1101-7.
19. **Burnett, A.L.**: "Nitric Oxide Control of Lower Genitourinary Tract Functions: A Review." *Urology*, 45, 6 (1995), 1071-83.
20. **Burnett, A.L.**, Nelson, R.J., Calvin, D.C., Liu, J., Demas, G.E., Klein, S.L., Kriegsfeld, L.J., Dawson, T.M., Snyder, S.H.: "Nitric Oxide Dependent Penile Erection in Mice Lacking Neuronal Nitric Oxide Synthase." *Mol. Med.*, 2,3 (1996), 288-96.
21. **Burnett, A.L.**, Donowitz, M., Marshall, F.F.: "Inhibition of Transport Processes of Intestinal Segments Following Augmentation Enterocystoplasty in Rats." *J. Urol.*, 156 (1996), 1872-5.
22. Wessellmann, U., **Burnett, A.L.**: "Treatment of Neuropathic Testicular Pain." *Neurology (Suppl.)* (1996), 206.
23. **Burnett, A.L.**: "Fascia Lata in Penile Reconstructive Surgery: A Reappraisal of the Fascia Lata Graft." *Plas. Reconstr. Surg.*, 99,4 (1997), 1061-7.
24. **Burnett, A.L.**: "Nitric Oxide in the Penis: Physiology and Pathology." *J. Urol.*, 157 (1997), 320-4.
25. Padma-Nathan, H., Hellstrom, W.J.G., Kaiser, F.E., et al, for the Medicated Urethral System for

- Erection (MUSE) Study Group.: "Treatment of Men with Erectile Dysfunction with Transurethral Alprostadil." *N. Engl. J. Med.*, 336 (1997), 1-7.
26. Han, M., **Burnett, A.L.**, Fishman, E.K., Marshall, F.F.: "The Natural History and Treatment of Adrenal Myelolipoma." *J. Urol.*, 157 (1997), 1213-6.
 27. **Burnett, A.L.**, Calvin, D.C., Chamness, S.L., Liu, J.-X., Dawson, V.L., Dawson, T.M., Snyder, S.H.: "Urinary Bladder-Urethral Sphincter Dysfunction in Mice with Targeted Disruption of Neuronal Nitric Oxide Synthase Models Idiopathic Voiding Disorders in Humans." *Nature Med.*, 3 (1997), 571-4.
 28. **Burnett, A.L.**, Calvin, D.C., Silver, R.I., Peppas, D.S., Docimo, S.G.: "Immunohistochemical Description of Nitric Oxide Synthase Isoforms in Human Clitoris." *J. Urol.*, 158 (1997), 75-8.
 29. Wesselmann, U., **Burnett, A.L.**, Heinberg, L.J.: "The Urogenital and Rectal Pain Syndromes." *Pain* 73 (1997), 269-94.
 30. **Burnett, A.L.**, Johns, D.G., Kriegsfeld, L.J., Klein, S.L., Calvin, D.C., Demas, G.E., Schramm, L.P., Tonegawa, S., Nelson, R.J., Snyder, S.H., Poss, K.D.: "Ejaculatory Abnormalities in Mice with Targeted Disruption of Heme Oxygenase-2." *Nature Med.* 4 (1998), 84-7.
 31. **Burnett, A.L.**: "Erectile Dysfunction: A Practical Approach For Primary Care." *Geriatrics* 53 (1998), 34-48.
 32. Crone, J.K., **Burnett, A.L.**, Chamness, S.L., Strandberg, J.D., Chang, T. S.: "Neuronal Nitric Oxide Synthase in the Canine Prostate: Aging, Sex Steroid and Pathology Correlations." *J. Androl.* 19 (1998), 358-64.
 33. **Burnett, A.L.**, Mostwin, J.L.: "In Situ Anatomical Study of the Male Urethral Sphincteric Complex: Relevance to Urinary Continence Preservation Following Major Pelvic Surgery." *J. Urol.* 160 (1998), 1301-6.
 34. Klein, S.L., Carnovale, D., **Burnett, A.L.**, Wallach, E.E., Zacur, H.A., Dawson, V.L., Nelson, R.J., Dawson, T.M.: "Impaired Ovulation in Mice with Targeted Deletion of the Neuronal Isoform of Nitric Oxide Synthase." *Mol. Med.* 4 (1998), 658-64.
 35. Althof, S.E., Corty, E.W., Levine, S.B., Seftel, A., Levine, F., **Burnett, A.L.**, McVary, K., Stecher, V.: "The EDITS: The Development of Questionnaires for Evaluating Satisfaction with Treatments for Erectile Dysfunction." *Urology* 53 (1999), 793-9.
 36. **Burnett, A.L.**, Wesselmann, U.: "History of the Neurobiology of the Pelvis." *Urology* 53 (1999), 1082-9.
 37. **Burnett, A.L.**, Wesselmann, U.: "Neurobiology of the Pelvis and Perineum: Principles for a Practical Approach." *J. Pelvic Surgery* 5 (1999), 224-32.
 38. Jarow, J.P., **Burnett, A.L.**, Geringer, A.M.: "Clinical Efficacy of Sildenafil Citrate Based upon Etiology and Response to Prior Treatment." *J. Urol.* 162 (1999), 722-5.
 39. Drazen, D.L., Klein, S.L., **Burnett, A.L.**, Wallach, E.E., Crone, J.K., Huang, P.L., Nelson, R.J.: "Reproductive Function in Female Mice Lacking the Gene for Endothelial Nitric Oxide Synthase." *Nitric Oxide: Biol. Chem.* 3, 5 (1999), 366-74.
 40. Kriegsfeld, L.J., Demas, G.E., **Burnett, A.L.**, Nelson, R.J.: "Ejaculatory Abnormalities in Mice

- Lacking the Gene for Endothelial Nitric Oxide Synthase (eNOS-/-)." *Physiol. Behav.* 67 (1999), 561-6.
41. **Burnett, A.L.:** "Oral Pharmacotherapy for Erectile Dysfunction: Current Perspectives." *Urology* 54 (1999), 561-6.
 42. Sezen, S. F., **Burnett, A.L.:** "Intracavernosal Pressure Monitoring in Mice: Responses to Electrical Stimulation of the Cavernous Nerve and to Intracavernosal Drug Administration." *J. Androl.* 21 (2000), 311-5.
 43. Basson, R., Berman, J., **Burnett, A., et al.:** "Report of the International Consensus Development Conference on Female Sexual Dysfunction: Definitions and Classifications." *J. Urol.* 163 (2000), 888-93.
 44. Rowland, D.L., **Burnett, A.L.:** "Pharmacotherapy in the Treatment of Male Sexual Dysfunction." *J. Sex Research* 37 (2000), 226-43.
 45. Walsh, P.C., Marschke, P., Ricker, D., **Burnett, A.L.:** "Patient-Reported Urinary Continence and Sexual Function Following Anatomic Radical Prostatectomy." *Urology* 55 (2000), 58-61.
 46. Walsh, P.C., Marschke, P., Ricker, D., **Burnett, A.L.:** "Use of Intraoperative Video Documentation to Improve Sexual Function Following Radical Retropubic Prostatectomy." *Urology* 55 (2000), 62-7.
 47. Gonzalez-Cadavid, N.F., **Burnett, A.L.,** Magee, T.R., Zeller, C.B., Vernet, D., Smith, N., Gitter, J., Rajfer, J.: "Expression of Penile Neuronal Nitric Oxide Synthase Variants in the Rat and Mouse Penile Nerves." *Biol. Reprod.* 63 (2000), 704-14.
 48. **Burnett, A.L.,** Allen, R.P., Davis, D.M. Wright, D.C., Trueheart, I.N., Chance, B.: "Near Infrared Spectrophotometry for the Diagnosis of Vasculogenic Erectile Dysfunction." *Int. J. Impotence Res.* 12 (2000), 247-54.
 49. **Burnett, A.L.:** "Novel Pharmacological Approaches in the Treatment of Erectile Dysfunction." *World J. Urol.* 19 (2001), 57-66.
 50. Meldrum, K.K., Meldrum, D.R., Sezen, S.F., Crone, J.K., **Burnett, A.L.:** "Heat Shock Prevents Simulated Ischemia-Induced Apoptosis in Renal Tubular Cells Via a PKC-dependent Mechanism." *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 281 (2001), R359-64.
 51. Meldrum, K.K., Meldrum, D.R., Hile, K.L., **Burnett, A.L.,** Harken, A.H.: "A Novel Model of Ischemia in Renal Tubular Cells Which Closely Parallels in Vivo Injury." *J. Surg. Res.* 99 (2001), 288-293.
 52. Sezen, S.F., Hoke, A., **Burnett, A.L.,** Snyder, S.H.: "Immunophilin Ligand FK506 is Neuroprotective for Penile Innervation." *Nature Med.* 7 (2001), 1073-4.
 53. Palese, M.A., **Burnett, A.L.:** "Corporoplasty Using Pericardium Allograft (Tutoplast) with Complex Penile Prosthesis Surgery." *Urology* 58 (2001), 1049-52.
 54. Akingba, A.G., **Burnett, A.L.:** "Endothelial Nitric Oxide Synthase Protein Expression, Localization, and Activity in the Penis of the Alloxan-Induced Diabetic Rat." *Mol. Urol.* 5 (2001), 189-97.
 55. **Burnett, A.L.,** Chang, A.G., Crone, J.K., Huang, P.L., Sezen, S.F.: "Non-Cholinergic Penile Erection in Mice Lacking the Gene for Endothelial Nitric Oxide Synthase." *J. Androl.* 23 (2002), 92-7.
 56. Hurt, K.J., Musicki, B., Palese, M.A., Crone, J.K., Becker, R.E., Moriarity, J.L., Snyder, S.H., **Burnett, A.L.:** "Akt-Dependent Phosphorylation of Endothelial Nitric Oxide Synthase Mediates Penile

- Erection." *Proc. Natl. Acad. Sci.* 99 (2002), 4061-6.
57. Barouch, L.A., Harrison, R.W., Skaf, M.M., Rosas, G.O., Cappola, T.P., Kobeissi, Z.A., Hobai, I.A., Lemmon, C.A., **Burnett, A.L.**, O'Rourke, B., Rodriguez, E.R., Huang, P.L., Lima, J.A.C., Berkowitz, D.E., Hare, J.M.: "Nitric Oxide Regulates the Heart by Spatial Confinement of Nitric Oxide Synthase Isoforms." *Nature* 416 (2002), 337-9.
 58. Meldrum, K.K., Hile, K., Meldrum, D.R., Crone, J.A., Gearhart, J.P., **Burnett, A.L.**: "Simulated Ischemia Induces Renal Tubular Cell Apoptosis Through a Nuclear Factor-KappaB Dependent Mechanism." *J. Urol.* 168 (2002), 248-52.
 59. Carson, C.C., **Burnett, A.L.**, Levine, L.A., Nehra, A.: "The Efficacy of Sildenafil Citrate in Clinical Populations." *Urology* 60 (2002), 12-27.
 60. **Burnett, A.L.**: "Nitric Oxide Regulation of Penile Erection: Biology and Therapeutic Implications." *J. Androl.* 23 (2002), S20-S26.
 61. **Burnett, A.L.**, Truss, M.C.: "Mediators of the Female Sexual Response: Pharmacotherapeutic Implications." *World J. Urol.* 20 (2002), 101-105.
 62. Zhou, L., **Burnett, A.L.**, Huang, P.L., Becker, L.C., Kuppusamy, P., Kass, D.A., Donahue, J.K., Proud, D., Sham, J.S.K., Dawson, T.M., Xu, K.Y.: "Lack of Nitric Oxide Synthase Depresses Ion Transporting Enzyme Function in Cardiac Muscle." *Biochem. Biophys. Res. Commun.* 294 (2002), 1030-35.
 63. Derogatis, L.R., Rosen, R., Leiblum, S., **Burnett, A.L.**, Heiman, J.: "The Female Sexual Distress Scale (FSDS): Initial Validation of a Standardized Scale for Assessment of Sexually Related Personal Distress in Women." *J. Sex. Marital. Ther.* 28 (2002), 317-30.
 64. Sezen, S.F., Blackshaw, S., Steiner, J.P., **Burnett, A.L.**: "FK506 Binding Protein 12 is Expressed in Rat Penile Innervation and Upregulated after Cavernous Nerve Injury." *Int. J. Impotence Res.* 14 (2002), 506-12.
 65. Magee, T.R., Zeller, C.B., Ferrini, M.G., Davila, H., Vernet, D., Sun, J., **Burnett, A.L.**, Lalani, R., Rajfer, J., Gonzalez-Cadavid, N.F.: "The Protein Inhibitor of NOS (PIN) and the NMDA Receptor are Expressed in the Rat and Mouse Penile Nerves and Co-localize with Penile Neuronal NOS (PnNOS)." *Biol. Reprod.* 68 (2003), 478-88.
 66. Meldrum, K.K., **Burnett, A.L.**, Meng, X., Misseri, R., Shaw, M.B.K., Gearhart, J.P., Meldrum, D.R.: "Liposomal Delivery of Heat Shock Protein 72 into Renal Tubular Cells Blocks Nuclear Factor- κ B Activation, Tumor Factor Necrosis- α Production, and Subsequent Ischemia-Induced Apoptosis." *Circ. Res.* 92 (2003), 294-299.
 67. **Burnett, A.L.**: "Rationale for Cavernous Nerve Restorative Therapies to Preserve Erectile Function after Radical Prostatectomy." *Urology* 61 (2003), 491-497.
 68. **Burnett, A.L.**: "Pathophysiology of Priapism: Dysregulatory Erection Physiology Thesis." *J. Urol.* 170 (2003), 26-34.
 69. **Burnett, A.L.**: "Neuroprotection and Nerve Grafts in the Treatment of Neurogenic Erectile Dysfunction." *J. Urol.* (2003), S31-S34.
 70. **Burnett, A. L.**: "Strategies to Promote Recovery of Cavernous Nerve Function after Radical Prostatectomy." *World J. Urol.* 20 (2003), 337-342.

71. Barouch, L.A., Cappola, T.P., Harrison, R.W., Crone, J.K., Rodriguez, E.R., **Burnett, A.L.**, Hare, J.M.: "Combined Loss of Neuronal and Endothelial Nitric Oxide Synthase causes Premature Mortality and Age-Related Hypertrophic Cardiac Remodeling in Mice." *J. Mol. Cell. Cardiol.* 35 (2003), 637-644.
 72. Gonzalgo, M.L., Brotzman, M., Trock, B.J., Geringer, A.M., **Burnett, A.L.**, Jarow, J.P.: "Clinical Efficacy of Sildenafil Citrate and Predictors of Long-term Response." *J.Urol.* 170 (2003), 503-506.
 72. Palese, M.A., Crone, J.K., **Burnett, A.L.**: "A Castrated Mouse Model of Erectile Dysfunction." *J. Androl.* (2003), in press.
 73. Palese, M.A., Crone, J.K., **Burnett, A.L.**: "A Castrated Mouse Model of Erectile Dysfunction." *J. Androl.* (2003), in press.
 74. **Burnett, A.L.**, Becker, R.E.: Immunophilin Ligands Promote Penile Neurogenesis and Erection Recovery after Cavernous Nerve Injury." *J. Urol.* (2003), in press.
 75. Kuppusamy, S.P., Wang, J.Q., Li, H., Becker, L.C., Dawson, T.M., Huang, P.L., **Burnett, A.L.**, Kuppusamy, P., Xu, K.Y.: "Nitric Oxide Regulates Sarcolemmal Membrane Ion Active Transport." *J. Biol. Chem.* (2003), in press.
- Non-peer-reviewed scientific articles
 1. **Burnett, A.L.**: "Management of Chronic Orchialgia: Consider A Multidisciplinary Approach." *AUA News*, Jan/Feb (1997).
 2. **Burnett, A.L.**: "Viagra and Women." *The Johns Hopkins Health Insider*, 1 (1998), 1-2.
 3. **Burnett, A.L.**: "Impotence: All About the Revolution in Treatment and Prevention." *Bottom Line Health*, 12 (1998), 13-4.
 4. **Burnett, A.L.**: "Significance of the Nitric Oxide Cascade in Erectile Function." *Drugs of Today*, 36(2-3) (2000), 155-62.
 5. **Burnett, A.L.**: "Nitric Oxide Synthase and Heme Oxygenase Knockout Mice - What Have We Learned?" *Int. J. Impotence Res.*, 12 (2000), S42-S44.
 6. **Burnett, A.L.**: "Innovations in Experimental Models in ED and FSD Research. Introduction." *Int. J. Impotence Res.*, 13 (2001), 134.
 7. **Burnett, A.L.**: "General Use of Animal Models for Investigation of the Physiology of Erection." *Int. J. Impotence Res.*, 13 (2001), 135-9.
 8. **Burnett, A.L.**: "Viagra in Men and Women." *Postgrad. Obstet. Gyn.*, 21(25), (2001), 1-6.
 9. **Burnett, A.L.**: "Smoking and Erectile Dysfunction.: hisandherhealth.com (2001).
 - Editorials, Reviews
 1. **Burnett, A.L.**: "Commentary, re: 'Nerves from Pelvic Plexus Contribute to Chronic Orchidalgia' by Zorn, B.H. et al., *Lancet* 1994; 343:1161." *Pain Med. J. Club J.*, 1,1 (1995), 40-1.

2. **Burnett, A.L.:** "Book Review, re: 'Gynecologic and Obstetric Urology' ed. by H.J. Buchsbaum and J.D. Schmidt." *J. Urol.*, 154 (1995), 1984-5.
3. **Burnett, A.L.:** "Commentary, re: 'Psychological Problems in Chronic Prostatitis Patients with Pain' by Egan, K.J. et al., *Clin. J. Pain* 1994; 10:218." *Pain Med. J. Club J.*, 1,4 (1995), 197-8.
4. **Burnett, A.L.:** "Commentary, re: 'Phantom Orchalgia' by Holland, J.M. et al. *J. Urol.* 1994; 152:2291." *Pain Med. J. Club J.*, 1,4 (1995), 201-2.
5. **Burnett, A.L.:** "Commentary, re: 'Topical Spinal Administration of a Nitric Oxide Synthase Inhibitor Prevents the Hyperreflexia Associated with a Rat Model of Persistent Visceral Pain' by Rice, A.S.C., *Neurosci. Lett.* 1995; 187:111." *Pain Med. J. Club J.*, 2,3 (1996), 151-2.
6. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 9 (1997), 57-8.
7. **Burnett, A.L.:** "Book Review, re: 'Female Urology' ed. by S. Raz." *J. Urol.*, 157 (1997), 2033-4.
8. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 9 (1997), 109-10.
9. **Burnett, A.L.:** "Commentary, re: 'Capsaicin in Treatment of Loin Pain/Hematuria Syndrome' by Bultitude, M.I., *Lancet* 1995; 345:921." *Pain Med. J. Club J.*, 3,1 (1997), 24-5.
10. **Burnett, A.L.:** "Commentary, re: 'The Evaluation of Pelvic Injury in the Female Athlete' by Short, J.W., et al., *Sports Med* 1995; 20:422." *Pain Med. J. Club J.*, 3,2 (1997), 105-7.
11. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 9 (1997), 173-4.
12. **Burnett, A.L.:** "Commentary, re: 'Urinary Nitric Oxide Synthetase Activity and Cyclic GMP Levels are Decreased with Interstitial Cystitis and Increased with Urinary Tract Infections' by Smith, S.D., et al., *J. Urol* 1996; 155:1432." *Pain Med. J. Club J.*, 3,3 (1997), 153-5.
13. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 10 (1998), 65-6.
14. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 10 (1998), 103-4.
15. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 10 (1998), 199-200.
16. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 10 (1998), 265-6.
17. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 11 (1999), 57-8.
18. **Burnett, A.L.:** "Book Review, re: 'Erectile Dysfunction' ed. by A. Morales." *Urology* (1999), 580.
19. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 11(1999), 239-40.
20. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 11(1999), 355-6.
21. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 12 (2000), 245.
22. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 12 (2000), 295-6.
23. **Burnett, A.L.:** "Review of Impotence Literature." *Int. J. Impotence Res.*, 12 (2000), 340-1.

24. **Burnett, A.L.:** "Commentary, re: 'Report of the International Consensus Development Conference on Female Sexual Dysfunction: Definitions and Classifications' by Basson R., et al, J. Urol 2000; 163: 888." J. Sex Marit. Ther., 27 (2001), 121-2.
25. **Burnett, A.L.:** "Book Review, re: 'Men's Health' ed. by R.S.Kirby, M.G. Kirby and R.N. Farah." Urology, 57 (2001), 209.
26. **Burnett, A.L.:** "Review of Impotence Literature." Int. J. Impotence Res., 13 (2001), 187-8.
27. **Burnett, A.L.:** "Review of Impotence Literature." Int. J. Impotence Res., 13 (2001), 360-2.
28. **Burnett, A.L.:** "Book Review, re: 'Male Sexual Function: A Guide to Clinical Management' ed. by J.J. Mulcahy." Urology 59 (2002), 795.
29. **Burnett, A.L.:** "Editorial Commentary, re: 'Environmental agents and erectile dysfunction: a study in a consulting population' by Oliva A., et al, J. Androl. 23 (2002), 479-80.
30. **Burnett, A.L.:** "Review of Impotence Literature." Int. J. Impotence Res., 14 (2002), 316.
31. **Burnett, A.L.:** "Editorial Comment 2, re: 'Efficacy of Tadalafil for the Treatment of Erectile Dysfunction at 24 and 36 Hours after Dosing: a Randomized Controlled Trial' by Porst H., et al, Urology, 62 (2003), 126.." Urol., 62 (2003), 126.
32. Nehra, A., Steers, W.D., Althof, S.E., Andersson, K.E., **Burnett, A.L.**, Costabile, R.A., Goldstein, I., Kloner, R.A., Lue, T.F., Morales, A., Rosen, R.C., Shabsigh, R., Siroky, M.B., King, L.: "Third International Conference on the Management of Erectile Dysfunction: Linking Pathophysiology and Therapeutic Response." J. Urol., 170 (2003), S3-S5.

- **Book Chapters**

1. Berrettini, W.H., Bardakjian, J., **Burnett, A.L.**, Nurnberger, J.I., Gershon, E.S.: "Beta- Adrenergic Receptor Function in Human Adult Skin Fibroblasts: A Study of Manic- Depressive Illness." In: Clark, S., (Ed.) Receptors, Antidepressants, and Depression. Ciba Foundation, Symposium No. 123, 1986.
2. Mostwin, J.L., **Burnett, A.L.:** "Anatomic Aspects of Urinary Incontinence." In: O'Donnell, P.D., (Ed.) Urinary Incontinence. Mosby-Year Book, Inc: St. Louis, MO, 1996.
3. **Burnett, A.L.:** "Neurophysiology of Erectile Function and Dysfunction." In: Hellstrom, W., (Ed.) Handbook of Sexual Dysfunction. Allen Press, Inc.: Lawrence, KS, 1999.
4. Wessellmann, U., **Burnett, A.L.:** "Genitourinary Pain." In: Wall, P.D., Melzack, R. (Eds.) Textbook of Pain. 4th Edition. Churchill Livingstone: New York, NY, 1999.
5. **Burnett, A.L.:** "Significance of the Nitric Oxide Cascade in Erectile Function." In: Melman, A. (Ed.) Treatment of Erectile Dysfunction: Clinical and Research Perspectives. Telesymposia Proceedings, Prous Science: Barcelona, Spain, 2000.
6. Andersson, K.-E, **Burnett, A.L.**, Chen, K.K., Christ, G. J., Rampin, O., Stief, C.: " Current Research and Future Therapies." In: Jardin, A., Wagner, G., Khoury, F., Giuliano, F., Padma-Nathan, H., Rosen, R. (Eds.) Erectile Dysfunction. Health Publication Ltd: Plymouth, United Kingdom, 2000.
7. **Burnett, A.L.**, Rodriguez, R., Jarrett, T.: "Male Anatomy and Physiology." In: Greenfield, L.J.,

Mulholland, M.W., Oldham, K.T., Zelenock, G.B., Lillemoe, K.D. (Eds.) *Surgery: Scientific Principles and Practice*, 3rd Edition. Lippincott-Raven Publishers: Philadelphia, PA, 2001.

8. **Burnett, A.L.:** "Erectile Dysfunction Module." In: Goldman D.R., (Ed.) *Physicians' Information and Education Resources (PIER)*. American College of Physicians - American Society of Internal Medicine: Philadelphia, PA, 2001.
 9. **Burnett, A.L.:** "Physiology of Erection and Pathophysiology of Erectile Dysfunction." In: Robaire, B., Chemes, H., Morales, C.R. (Eds.) *Andrology in the 21st Century*. Medimond Publishing Company, Inc.: Englewood, N.J., 2001.
 10. **Burnett, A.L.:** "New Advances in the Medical Management of Sexual Dysfunction." In: Robaire, B., Chemes, H., Morales, C.R. (Eds.) *Andrology in the 21st Century*. Medimond Publishing Company, Inc.: Englewood, N.J., 2001.
 11. **Burnett, A.L.:** "Smoking and Erectile Dysfunction." In: Samet, J. (Ed.) *Active Smoking and Health: A Report of the Surgeon General*. U.S. Department of Health and Human Services: Rockville, MD, 2001, in review.
 12. Fagan, P.J., **Burnett, A.L.** Rogers, L., Schmidt, W.W. Jr.: "Sexual Disorders." In: Barker, L.R., Burton, J.R., Zieve, P.D., Fiebach, N., Kern, D.E., Thomas, P., Ziegelstein, R. (Eds.) *Principles of Ambulatory Medicine*, Sixth Edition. Lippincott, Williams, and Wilkins: Philadelphia, PA, 2001.
 13. **Burnett, A.L.,** Chang, A.G., Sezen, S.F., Crone, J.K.: "Cholinergic Stimulation of Penile Erection in Mice." In: Robaire, B., Chemes, H., Morales, C.R. (Eds.) *Andrology in the 21st Century*. Medimond Publishing Company, Inc.: Englewood, N.J., 2001.
 14. **Burnett, A.L.:** "Epidemiology and Physiology of Erectile Dysfunction." In: Carson, C. C., Nehra, A. (Eds.) *PDE-5 Inhibitors in the Treatment of Erectile Dysfunction*. InforMEDical Communications, Inc.: Carlisle, MA, 2001.
 15. Wesselmann, U., **Burnett, A.L.:** "Genitourinary Pain." In: Melzack, R., Wall, P.D. (Eds.) *Handbook of Pain Management*. Churchill Livingstone: Edinburgh, Scotland, 2002.
 16. **Burnett, A.L.:** "Special Populations." In: Nehra, A. (Ed.) *Treating Erectile Dysfunction: Advances in PDE-5 Inhibitors*. InforMedical Communications, Inc.: Carlisle, MA, 2002.
 17. **Burnett, A.L.:** "Penile Anatomy." In: Teloken, C., Tannhauser, M., Teodosio Da Ros, C. (Eds.) *Male Sexual Dysfunction*. Livraria e Editora Revinter Ltda: Matriz, Brasil, 2002.
 18. **Burnett, A.L.:** "Pathophysiology of Erectile Dysfunction." In: Teloken, C., Tannhauser, M., Teodosio Da Ros, C. (Eds.) *Male Sexual Dysfunction*. Livraria e Editora Revinter Ltda: Matriz, Brasil, 2002.
 19. **Burnett, A.L.:** "Urinary Incontinence: Management Strategies and the Impact of Emerging Therapies." In: Burnett, A.L. (Ed.) *Clinical and Cost-Effective Strategies in the Management of Urinary Incontinence*. Managed Care Consultant, Vol. 2, No. 7, 2002.
- **Other Media (audiovisual presentation)**
 1. Walsh, P.C., **Burnett, A.L.,** Partin, A.W.: "Anatomical Radical Retropubic Prostatectomy: Evolution of the Surgical Technique." American Urological Association National Meeting. San Antonio, TX. May 15-20, 1993.

Inventions, Patents, Copyrights:

- **United States Patents**

Title: "Treatments for Male Sexual Dysfunction."

Patent No.: 5,439,938

Date: August 8, 1995

Inventors: Solomon H. Snyder, Arthur L. Burnett, Charles J. Lowenstein, David S. Brett, Thomas S.K. Chang.

Abstract: Methods and devices are taught for regulating penile erection and urethral function. Inhibitors of nitric oxide synthase and precursors of nitric oxide are applied to relax or contract the muscles of the corpus cavernosum and the urethra.

Title: "Method for Treating Nerve Injury Caused as a Result of Surgery"

Patent No.: Pending (Serial No. 10/156/735)

Date: June 29, 2002

Inventors: Joseph P. Steiner, Solomon H. Snyder, Arthur L. Burnett

Abstract: Methods for treating nerve injury caused as a consequence of surgery, and specifically as a consequence of prostate surgery, or for methods of neuroprotection of penile innervation, by administering a neurotrophic compound to a patient in need thereof.

Extramural Sponsorship:

- **Grants/Contracts, 1994-present**

1. Actions of immunophilins in penile nerve function; 2003-8; NIH-NIDDK RO1 DK064679; PI: AL Burnett. 40% effort
2. Immunophilin localization in the penile innervation; 2003-8; Developmental Research Project 2, Prostate Cancer SPORE Program/NIH; PI: AL Burnett. 10% effort
3. Neurotrophic actions of immunophilin ligands after cavernous nerve injury; 2003-4; Guilford Pharmaceuticals; PI: AL Burnett. 5% effort
4. Long-term effect of sildenafil on penile erection by blood-flow induced phosphorylation and activation of Akt and eNOS in young and old rats; 2002-3; Pfizer, Inc., Co-PI: AL Burnett. 5% effort
5. The role and regulation of nNOS phosphorylation in penile erection; 2002-3; National Kidney Foundation of Maryland, Co-PI: AL Burnett. 5% effort
6. Role of immunophilin drugs in restoration of genitourinary function after pelvic nerve injury; 2000-1; Guilford Pharmaceuticals, PI: AL Burnett. 5% effort
7. Intracavernosal pressure studies in MC4R KO mice; 1999-00; Merck & Co., Inc., PI: AL Burnett. 5% effort
8. Role of immunophilin drugs in restoration of urogenital function after nerve injury; 1998-99; National Kidney Foundation of Maryland, Co-PI: AL Burnett. 5% effort
9. Nitric oxide regulatory system in the penis; 1998-03; NIH-NIDDK K08 DK02568; PI: AL Burnett. 75% effort

10. Phase II safety study of 5 mg apomorphine SL versus placebo in the treatment of patients diagnosed with male erectile dysfunction following a bilateral nerve-sparing radical retropubic prostatectomy; 1998-99; TAP Holdings, Inc.; M97-788; PI: AL Burnett. 0% effort
11. Effects of losartan versus atenolol on erectile function in patients with essential hypertension; 1997-98; Merck & Co., Inc.; 171-00; Co-PIs: ~~AL Burnett~~ AL Burnett. 0% effort
12. Dose escalation study with Tolterodine in patients with overactive bladder; 1997-98; Pharmacia/Upjohn Co.; 97-OATO-039; PI: AL Burnett. 0% effort
13. Spectrophotometric evaluation of vasculogenic impotence; 1997-2000; NIH(SBIR)2R44HL53010-O2A1; Co-PIs: ~~AL Burnett~~ AL Burnett. 10% effort
14. Alloxan-induced diabetic rat model of erectile dysfunction: Howard Hughes Summer Research Fellowship; 1997; Undergraduate student: M Peterkin; Sponsor: AL Burnett. 0% effort
15. Psychometric properties of the erectile dysfunction inventory of treatment satisfaction; 1997; Pfizer, Inc.; EDITS; PI: AL Burnett. 0% effort
16. Open non-comparative study to assess long-term safety of Sildenafil in patients with erectile dysfunction; 1996-97; Pfizer, Inc.; 148-103C; PI: AL Burnett. 0% effort
17. Dose escalation study to assess the efficacy and safety of Sildenafil administered to male patients with erectile dysfunction; 1996; Pfizer, Inc.; 148-103; PI: AL Burnett. 0% effort
18. Nitric oxide regulatory system in the penis: Merck Clinician Scientist Award; 1996-98; PI: AL Burnett. 75% effort
19. Long-term evaluation of the safety and efficacy of Alprostadil administered by MUSE protocol; 1995-98; VIVUS, Inc.; 95-01; PI: AL Burnett. 0% effort
20. Spectrophotometric evaluation of vasculogenic impotence; 1995-96; NIH (SBIR) I R43 HL53010-O1A1; Co-PIs: ~~AL Burnett~~ AL Burnett. 10% effort
21. One year open label evaluation of the safety and efficacy of Alprostadil administered by MUSE protocol; 1994-96; VIVUS, Inc.; 94-03; PI: AL Burnett. 0% effort
22. Pharmacoeconomic evaluation of intracavernosal Alprostadil sterile powder versus external vacuum device in treatment of erectile dysfunction; 1994-95; Pharmacia/Upjohn, Inc.; M/5655/0002; PI: AL Burnett. 0% effort
23. Safety and efficacy of Alprostadil administered by MUSE; 1994-95; VIVUS, Inc.; 94-01; PI: AL Burnett. 0% effort
24. Nitric oxide and carbon monoxide: Putative mediators of urogenital system; 1994-96; AFUD/Searle New Investigator Award; PI: AL Burnett. 75% effort

EDUCATIONAL ACTIVITIES

Teaching:

- Classroom Instruction

1. "Physiology of the Sexual Response," 1st Year Medical School Physiology Course, Johns Hopkins University School of Medicine; 1999-Present; (1 hr lecture yearly)
 2. "Pharmacological Treatment of Sexual Dysfunction," 2nd Year Medical School Pharmacology Course, Johns Hopkins University School of Medicine; 1998-Present; (1 hr lecture yearly)
- Clinical Instruction
 1. "Urologist's Approach to Management of Erectile Dysfunction," Human Sexuality Section, Psychiatry Department Residency Training Program, Johns Hopkins University School of Medicine; 1996-Present; (1 hr lecture twice yearly)
 2. "Clinical Clerkship in Urology," 2nd Year Medical School Clinical Medicine Course, Johns Hopkins University School of Medicine; (three 3 hr sessions yearly)
 - CME Instruction
 1. The Future of Sexual Medicine: Today's Research, Tomorrow's Vision; American Urological Association Meeting Educational Course; April 26, 2003; Faculty Advisor, Chicago, IL
 2. Erectile Dysfunction and Androgens; American Society of Andrology Annual Meeting Postgraduate Course; March 29, 2003; Course Director, Phoenix, AZ
 3. Clinical and Cost-Effectiveness Strategies in the Treatment of Urinary Incontinence; Johns Hopkins Medical Institutions; January 5, 2002; Course Director, Atlanta, GA.
 4. Erectile Dysfunction; Johns Hopkins University Men's Health Resource Center; December 2001; Faculty Member, Baltimore, MD.
 5. Fifth Annual Men's Health 2001; Johns Hopkins Medical Institutions; March 23, 2001; Course Co-Director, Baltimore, MD.
 6. Innovations in Experimental Models in Erectile Dysfunction and Female Sexual Dysfunction Research; International Society of Impotence Research; November 29, 2000; Course Chairman, Perth, West Australia.
 7. Diagnosis and Management of Erectile Dysfunction; American Urological Association; May 3, 2000; Instructional Course Faculty Member, Atlanta, GA.
 8. Fourth Annual Men's Health 2000; Johns Hopkins Medical Institutions; March 31, 2000; Course Co-director, Baltimore, MD.
 9. Third Annual Men's Health 1999; Johns Hopkins Medical Institutions; April 9, 1999; Symposium Co-director, Baltimore, MD.
 10. Men's Health 1998; Johns Hopkins Medical Institutions; March 20, 1998; Symposium Co-director, Baltimore, MD.
 11. First Men's Health Symposium; Johns Hopkins Medical Institutions; November 11, 1996; Symposium Co-director, CME Course, Baltimore, MD.
 12. A Practical Approach to Urodynamics; Brady Urological Institute, Johns Hopkins Medical Institutions; May 20, 1995; Course Co-director, Baltimore, MD.

- Training grant participation
Cellular and Molecular Medicine Graduate Training Program, Johns Hopkins University School of Medicine; 1997-Present; Faculty Member

Editorial Activities:

- Editorial Board appointments
 1. Guest Editor, Female Sexual Function and Dysfunction Edition, World Journal of Urology; 2002
 2. Consultant, Editorial Advisory Board, Clinical Therapeutics; 2001 - Present
 3. Urological Consultant, Advisory Board, Advanced Studies in Medicine; 2000-Present

4. Editorial Board, International Journal of Impotence Research; 1999-Present
5. Editorial Board, Journal of Andrology; 1998-Present
6. Committee Member, Survey Section, International Journal of Impotence Research; 1996-Present
7. Expert Analyst, The Pain Medicine Journal Club Journal; 1995-Present
- Journal peer review activities
American Journal of Physiology; Annals of Neurology; Biology of Reproduction; Clinical Therapeutics; European Journal of Pharmacology; Journal of the American Geriatrics Society; Journal of Andrology; Journal of Urology; Lancet; Life Sciences Journal; Nature Medicine; The Prostate; Reproduction, Fertility and Development; Science; Urology

CLINICAL ACTIVITIES

Certification:

- Medical
Maryland State License (1990, —)
- Boards
Diplomate, American Board of Urology (1998, —)

Service Responsibilities:

1. Prostate Cancer Screening Week, Director, Johns Hopkins Hospital, Baltimore, MD; 1999-2001.
2. Pelvic Floor and Reconstructive Pelvic Surgery Group, Johns Hopkins Hospital, Baltimore, MD; 1998-Present.
3. Full-time Attending, Adult Urology Service, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center; 1994-Present.

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments:

1. Advisory Committee for the Office of Funded Programs, 2001-Present
2. Postbaccalaureate Committee, 2001-Present
3. Medical School Council, 1999-Present
4. Young Investigators' Day Committee, 1997-Present
5. Faculty Advisory Committee, 1996-Present

Professional Societies:

1. American Society for Peripheral Nerve; 2003-Present

2. International Society for the Study of Women's Sexual Health; 2000-Present; Member
3. The American College of Surgeons; 1999-Present; Member
4. The Society of Genitourinary Reconstructive Surgeons; 1998-Present; Member
5. American Urogynecologic Society; 1998-Present; Member
6. Urodynamics Society; 1997-Present; Member
7. The Society of Black Academic Surgeons; 1997-Present; Member
8. International Society for Sexual and Impotence Research; 1996-Present; Member
9. Monumental City Medical Society; 1994-Present; Member
10. National Medical Association; 1994-Present; Member
11. Sexual Medicine Society of North America; 1994-Present; Member
12. American Society of Andrology; 1994-Present; Member
13. Society of Government Service Urologists; 1991 -Present; Member
14. American Urological Association; 1990-Present; Member
15. American Medical Association; 1988-Present; Member
16. Medical and Chirurgical Faculty of the State of Maryland; 1985-Present; Member
17. National Association for the Advancement of Colored People, Baltimore Branch; 1984-Present; Member
18. Reserve Officers' Association of the United States; 1984-Present; Member
19. Sigma XI Scientific Research Society; 1984-Present; Member

Advisory Committees:

1. American Society of Andrology 2003 Program Committee; 2001-Present; 2003 Postgraduate Course Chairman
2. American Board of Urology Examination Committee; 2001-Present; Member
3. Urology Study Section, NIH Center for Scientific Review; 2001-Present; Member (4-year term)
4. Society for the Study of Impotence, Website Committee; 2000-Present; Member
5. Mid-Atlantic Section of the American Urological Association, Inc.: Nominating Committee, 1999-2000, Member; Arrangements Committee, 2001-2002, Chairman
6. Johns Hopkins Men's Health Advisory Board; 1998-Present; Member
7. National Kidney Foundation of Maryland Medical Advisory Board; 1997-Present; Member

8. Johns Hopkins Comprehensive Women's Health Center Oversight Committee; 1997-Present; Member
9. Johns Hopkins Comprehensive Diabetes Center's Advisory Board; 1997-Present; Member

Review Groups:

1. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG-UROL-01; July 9-10, 2002; NIH Grant Reviewer
2. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-NIH-CSR-UROL; March 12-13, 2002; NIH Grant Reviewer
3. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG-UROL-01; November 8-9, 2001; NIH Grant Reviewer
4. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG-UROL-01; July 16-17, 2001; NIH Grant Reviewer
5. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG-UROL-01; March 6-7, 2001; NIH Grant Reviewer
6. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG-UROL-01; November 14, 2000; NIH Grant Reviewer
7. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG-UROL-01/02; March 8-9, 2000; NIH Grant Reviewer
8. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG1-UROL-01; March 15-16, 1999; NIH Grant Reviewer
9. Clinical Sciences Special Emphasis Panel (Urology), NIH Center for Scientific Review, Initials-ZRG4-UROL-01; November 20, 1997; NIH Grant Reviewer
10. Clinical Sciences Special Emphasis Panel (Urology), NIH Division of Research Grants, Initials-ZRG4-GMB-05; March 18, 1997; NIH Grant Reviewer
11. Clinical Sciences Special Emphasis Panel (Urology), NIH Division of Research Grants, Initials-ZRG4-GMB-05, Group Code-NG8; November 19, 1996; NIH Grant Reviewer

Consultantships:

1. Second International Consultation on Erectile and Sexual Dysfunctions, Future Treatment Targets, International Consultation on Urological Diseases; 2002-2003; Consultant
2. Active Smoking and Health: Surgeon General's Report 2001, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention; 2000-2; Consultant
3. Clinical Evidence, Physicians' Information and Education Resource (PIER), American College of Physicians - American Society of Internal Medicine; 1999-Present; Consultant/Peer Reviewer
4. First International Consultation on Erectile Dysfunction, Current Research and Future Therapies, Palais des Congres and World Health Organization; 1998-1999; Consultant

RECOGNITION

Awards, honors:

1. Emil Tanagho Prize, for Best Innovative Research (senior author); 2002; International Society for Sexual and Impotence Research
 2. Yamanouchi Best Abstract Prize in Impotence; 2001; American Urological Association
 3. Fellow; 1999; American College of Surgeons
 4. Pfizer Scholar in Urology Award; 1999; Pfizer, Inc.
 5. Yamanouchi Best Abstract Prize in Impotence; 1998; American Urological Association
 6. Merck Clinician Scientist Award; 1996; Merck & Co.
 7. First Place, Lapidus Annual Essay Contest on Urodynamic and Neurourology Research; 1996; American Urological Association
 8. Searle New Investigator Research Award; 1994; American Foundation for Urologic Disease, Inc.
 9. Male Reproduction/Urology Prize Paper; 1993; American Fertility Society
 10. Second Place, Lapidus Annual Essay Contest on Urodynamic and Neurourology Research; 1993; American Urological Association
 11. First Place, Laboratory Research, Annual Resident Prize Essay Contest; 1993; American Urological Association
 12. First Place, Basic Science, Resident Essay Competition; 1992; Mid-Atlantic Section of the American Urological Association
 13. Student Merit Award; 1992; American Society of Andrology
 14. Young Investigator Award for Post-Doctoral Investigation, Clinical Science; 1992; The Johns Hopkins University School of Medicine
 15. Summer Research Fellowship Program; 1985; Clinical Neurogenetics Branch, National Institute of Mental Health, National Institute of Health, Warren G. Magnuson Clinical Center
 16. Charles M. Cannon Memorial Prize; 1984; Biology Department Thesis Symposium, Princeton University
-

Invited Talks, Panels:

1. Visiting Professor; October 17, 1996; Washington Urological Society, Annual Meeting, Washington, D.C.
2. Visiting Professor; February 2-3, 1998; Department of Urology, State University of New York, Health Science Center at Brooklyn, Brooklyn, N.Y.

3. Visiting Professor; February 21, 1998; Washington Urological Society's Annual Scholar's Day, Washington, D.C.
4. Visiting Professor; November 19, 1998; Albert Einstein College of Medicine, Graduate Physiology Course, Bronx, N.Y.
5. Visiting Professor; February 15-16, 2001; Department of Urology, West Virginia University, Morgantown, W.VA.
6. Visiting Professor, June 28-30, 2001; Department of Urology, Tulane University Health Sciences Center, New Orleans, LA
7. Visiting Professor, November 1, 2001; Department of Urology, Harbor-UCLA and Drew University Medical Centers, Los Angeles, CA
8. Visiting Professor, April 29-30, 2002; Departments of Physiology and Surgery, Section of Urology, Medical College of Georgia, Augusta, GA
9. Visiting Professor, September 12, 2002; Department of Biomedical Sciences, College of Veterinary Medicine, Missouri University, Columbia, MO
10. Visiting Professor, October 17-18, 2002; Institute for Sexual Medicine, Departments of Urology and Medicine, Boston University School of Medicine, Boston, MA

Lectures:

1. "Nitric Oxide: A Physiologic Mediator of Penile Erection." April 9, 1992; The Johns Hopkins University School of Medicine Fifteenth Annual Young Investigators' Day. Baltimore, MD
2. "The Role of Nitric Oxide in the Physiology of Erection." March 17-19, 1993; International Conference on Peyronie's Disease: Advances in Basic and Clinical Research. Bethesda, MD
3. "Neurogenic Mechanisms in Peyronie's Disease: Nitric Oxide is a Potential Neurotoxin in the Penis." March 17-19, 1993; International Conference on Peyronie's Disease: Advances in Basic and Clinical Research. Bethesda, MD
4. "Evaluation and Treatment of Urinary Incontinence." March 18, 1993; International Urological Sciences, Inc. Urology Workshop. Towson, MD
5. "General Anatomy and Physiology." May 20, 1995; Brady Urological Institute, Course: A Practical Approach to Urodynamics. Baltimore, MD
6. "Urodynamics Case Studies and Pharmacologic Applications in Adult Neurogenic Bladders." May 20, 1995; Brady Urological Institute, Course: A Practical Approach to Urodynamics. Baltimore, MD
7. "Progress in Surgical Repair of Female Genitalia." June 12, 1995; Endocrine Society, 77th Annual Meeting, Symposium on Adrenal Hyperplasia. Baltimore, MD
8. "Erectile Dysfunction: Myths vs. Truths." July 11, 1995; Medical Society of Delaware, Medicine Conference. Newark, DE
9. "Diagnosis and Management of Male Erectile Dysfunction." August 2, 1995; Suburban Hospital, General Medicine Grand Rounds. Bethesda, MD
10. "Cancer of the Prostate: A Urologist's Perspective." August 10, 1995. Kappa Alpha Psi Fraternity, Inc.

Grand Chapter Meeting. Philadelphia, PA

11. "Erectile Dysfunction: Myths vs. Truths." May 17, 1996; Maryland Academy of Family Physicians, 48th Annual Meeting. Ocean City, MD
12. "Current Therapies in the Treatment of Male Impotence." September 21, 1996; Medical Education Resources, Course: Innovations in the Diagnosis and Treatment of Benign Prostatic Hyperplasia. Lafayette Hill, PA
13. "Advances in the Diagnosis and Treatment of Prostate Cancer." October 7, 1996; Johns Hopkins Medicine Discovery Series. Annapolis, MD
14. "Current Concepts and Management of Male Urinary Incontinence." October 17, 1996; Washington Urological Society, Washington, DC
15. "Urinary Incontinence in Men." October 19, 1996; Johns Hopkins Medical Institutions, 24th Annual Symposium on Geriatric Medicine, Course: Urinary Incontinence. Baltimore, MD
16. "The Bladder-Prostate Unit: Physiology and Pharmacology." November 3, 1996; First Donald Coffey Urology Research Conference. Palm Beach, FL
17. "Epidemiology and Treatment of Erectile Dysfunction." November 11, 1996; Johns Hopkins Medical Institutions, First Men's Health Symposium. Baltimore, MD
18. "Impotence." November 21, 1996; Discussant, Southern Medical Association National Meeting, Multi-Specialty Grand Rounds. Baltimore, MD
19. "Management of Erectile Dysfunction: Update 1996." November 23, 1996; Brady Urological Institute. Johns Hopkins Medical Institutions, Course: Urology Update 1996. Baltimore, MD
20. "Current Therapies in the Treatment of Erectile Dysfunction." December 14, 1996; Johns Hopkins Medical Institutions, Surgical Grand Rounds. Baltimore, MD
21. "Impotence." March 8, 1997; University of Alabama School of Medicine/Huntsville Program, 15th Annual Review of Modern Therapeutics 1997. Huntsville, AL
22. "Evaluation and Treatment Options for Erectile Dysfunction." May 3, 1997; Medical Education Resources, Course: BPH and Other Urologic Disorders: A Primary Care Perspective. Braselton, GA
23. "Management of Female Urinary Incontinence." May 17, 1997; Maryland Academy of Family Physicians, 49th Annual Meeting. Ocean City, MD
24. "Management of Erectile Dysfunction: Update." July 12, 1997; Urological Association of Pennsylvania, State College, PA
25. "Current Perspectives in the Neurophysiology and Neuropharmacology of Penile Erection." September 6, 1997; Countway Lecture, Harvard Medical School, Division of Urological Surgery, Boston, MA
26. "Stress Incontinence: What We Need to Know." September 29, 1997; Medical Education Program, Peninsula Regional Medical Center. Salisbury, MD
27. "Prostate Cancer in the African-American Male." October 20, 1997; The Sixth Annual Edward J. Mason Lecture in Surgery, Howard University College of Medicine, Department of Surgery, Washington, DC

28. "Management of Erectile Dysfunction." October 25, 1997; Conjoint Clinic, Medicine Grand Rounds, Johns Hopkins Medical Institutions. Baltimore, MD
29. "Female Pelvic Reconstruction: What the Urologist Needs to Know." November 22, 1997. Brady Urological Institute. Johns Hopkins Medical Institutions, Course: Urology Update 1997. Baltimore, MD
30. "Current Perspectives in the Neurophysiology and Neuropharmacology of Penile Erection." December 3, 1997; Urology Grand Rounds, George Washington University School of Medicine, Washington, DC
31. "Male Erectile Dysfunction." December 12, 1997; Topics in Ambulatory Medicine VIII, The Johns Hopkins Bayview Medical Center. Baltimore, MD
32. "Clinical Diagnosis and Management of Impotence." February 2-3, 1998; Visiting Professorship, State University of New York, Health Science Center at Brooklyn, Brooklyn, N.Y.
33. "Neurophysiology and Neuropharmacology of Penile Erection." March 5, 1998; Urology Grand Rounds, University of Pennsylvania School of Medicine, Philadelphia, PA.
34. "Urinary Incontinence." March 5, 1998; Medical Staff CME Lecture, Doctors Community Hospital. Lanham, MD
35. "Neurophysiology and Neuropharmacology of Penile Erection." March 12, 1998; Urology Grand Rounds, St. Luke's Hospital, New York, N.Y.
36. "Advances in the Management of Erectile Dysfunction." April 13, 1998; Urology Grand Rounds, Georgetown University Medical Center, Washington, DC
37. "Neurophysiology and Neuropharmacology of Penile Erection." April 20, 1998; Urology Grand Rounds, Montefiore Medical Center, Bronx, N.Y.
38. "What's New for the Treatment of Overactive Bladder." May 6, 1998; Frank Jones Urological Society, Washington, DC
39. "Advances in the Management of Erectile Dysfunction." May 9, 1998; Conjoint Clinic, Medicine Grand Rounds, Johns Hopkins Medical Institutions. Baltimore, MD
40. "Recent Advancements in the Treatment of Erectile Dysfunction." June 17, 1998; Department of Medicine Grand Rounds, St. Joseph's Medical Center, Baltimore, MD
41. "New Developments in Erectile Dysfunction." June 28, 1998; University of Santo Tomas Medical Alumni Association of Maryland, Towson, MD
42. "Diagnosis and Management of Overactive Bladder." September 5, 1998; American Association of Physicians of Indian Origin, Maryland Chapter, Baltimore, MD
43. "Viagra and Prostate Cancer." September 13, 1998; Opening Address, The Black Man's Challenge: Prostate Cancer, Howard University Cancer Center Program, Bethesda, MD
44. "Molecular Biology of Nitric Oxide Synthase Isoforms." November 19, 1998; Graduate Physiology Course, Albert Einstein College of Medicine, Bronx, N.Y.
45. "The Male Urinary Sphincter: Anatomical Concepts." December 5, 1998; Brady Urological Institute. Johns Hopkins Medical Institutions, Course: Urology Update 1998. Baltimore, MD

46. "Evaluation of the Painful Bladder - Role of Urodynamics and Endoscopy." February 26, 1999; The 16th Annual Houston Everett Memorial Course in Urogynecology, Johns Hopkins Medical Institutions, Baltimore, MD
47. "New Oral Therapies for Erectile Dysfunction." April 9, 1999; Johns Hopkins Medical Institutions, 3rd Annual Men's Health Symposium. Baltimore, MD
48. "Basic Mechanisms of Erectile Dysfunction." April 12, 1999; Erectile Dysfunction Symposium, American Society of Andrology, Louisville, KY
49. "From Nitric Oxide to Viagra: The First Effective Oral Pharmacotherapy for Erectile Dysfunction." June 11, 1999; Scientific Symposium to Celebrate Donald S. Coffey's 40 Years of Scientific Contributions to Johns Hopkins, Baltimore, MD
50. "Anatomic Radical Prostatectomy: Technique and Outcomes." August 23, 1999; Guest Speaker Program, Sociedad Ecuatoriana De Urologia, Nucleo Norte, Quito, Ecuador
51. "Update on Oral Pharmacotherapies for Erectile Dysfunction." November 13, 1999; Course: Urology Update 1999; Brady Urological Institute, Johns Hopkins Medical Institutions, Baltimore, MD
52. "Disorders of Voiding: State of the Art 1999." November 16, 1999; Renaphobia Relief: Topics in Medicine, Nephrology and Urology for Primary Care, Johns Hopkins Bayview Medical Center, Baltimore, MD
53. "Voiding Dysfunction and Drug Therapy." February 25, 2000; The 17th Annual Houston Everett Memorial Course in Urogynecology, Johns Hopkins Medical Institutions, Baltimore, MD
54. "Management of Erectile Dysfunction: Beyond Viagra." March 4, 2000; Conjoint Clinic, Medicine Grand Rounds, Johns Hopkins Medical Institutions, Baltimore, MD
55. "Impact of Diabetes on Bladder Control and Sexual Function." March 15 and 22, 2000; Johns Hopkins Medicine Brand Builders, Baltimore, MD
56. "Viagra Update." March 31, 2000; Johns Hopkins Medical Institutions, 4th Annual Men's Health Symposium. Baltimore, MD
57. "Nitric Oxide Synthase and Heme Oxygenase Knockout Mice - What Have We Learned?" September 15, 2000; Society for the Study of Impotence Fall Meeting, Cleveland, OH
58. "Viagra in Men and Women." November 11, 2000; Women's Journey, Johns Hopkins Medical Institutions, Baltimore, MD
59. "General Use of Animal Models for Investigation of the Physiology of Erection." November 29, 2000; 9th World Meeting on Impotence Research, Perth, Western Australia
60. "Pharmacological Treatment of Sexual Dysfunction." February 16, 2001; Visiting Professorship, West Virginia University, Morgantown, WV
61. "Erectile Function and Continence After Radical Prostatectomy." February 16, 2001; Visiting Professorship, West Virginia University, Morgantown, WV
62. "First Line of Treatment for Erectile Dysfunction." March 23, 2001; Johns Hopkins Medical Institutions, Fifth Annual Men's Health Symposium, Baltimore, MD

63. "Radical Prostatectomy: Treatment of Choice for Localized Prostate Cancer." March 24, 2001; Urology Update 2001, Ninth Annual Seminar, West Virginia University School of Medicine, Morgantown, WV
64. "Physiology of Erection and Pathophysiology of Erectile Dysfunction." June 14, 2001; Postgraduate Course, American Society of Andrology, Montreal, Canada
65. "New Advances in the Medical Management of Sexual Dysfunction." June 18, 2001; Male Sexual Dysfunction Symposium, VII International Congress of Andrology, Montreal, Canada
66. "Anatomic Radical Prostatectomy: Techniques to Improve Functional Outcomes." June 29, 2001; Visiting Professorship, Tulane University, New Orleans, LA
67. "Therapeutic Strategies to Preserve Cavernous Nerve Function After Radical Prostatectomy." June 29, 2001; Visiting Professorship, Tulane University, New Orleans, LA
68. "Current Management of Posterior Urethral Distraction." June 29, 2001; Visiting Professorship, Tulane University, New Orleans, LA
69. "Erectile Dysfunction: Perspectives on the Scientific Evolution of the Field." June 30, 2001; Visiting Professorship, Tulane University, New Orleans, LA
70. "Sexual Dysfunction." July 12, 2001; 2nd International Transverse Myelitis Symposium, Baltimore, MD
71. "Prostate Cancer: Perspective on African-American Males." September 24, 2001; Department of Veterans Affairs Medical Center, Washington, DC
72. "Therapeutic Strategies to Preserve Cavernous Nerve Function After Radical Prostatectomy." November 1, 2001; Visiting Professorship, Harbor-UCLA Medical Center, Los Angeles, CA
73. "Significance of the Nitric Oxide Cascade in Erectile Function." November 1, 2001; Visiting Professorship, Drew University Medical Center, Los Angeles, CA
74. "Men's Health Part I." November 8, 2001; The National Conference for Nurse Practitioners, Baltimore, MD
75. "Men's Health Part II." November 8, 2001; The National Conference for Nurse Practitioners, Baltimore, MD
76. "Neuroprotection of Cavernous Nerves: Potential to Improve Erection Recovery after Radical Prostatectomy." November 10, 2001; Brady Urological Institute. Johns Hopkins Medical Institutions, Course: Urology Update 2001. Baltimore, MD
77. "Cigarette Smoking as a Risk Factor for Erectile Dysfunction: What is the Evidence?" December 7, 2001; Sexual Medicine Society of North America, Inc., Third Annual Meeting, Charleston, SC
78. "Neuroanatomy of the Pelvis and Genital Structures." April 8, 2002; National Institute for Child Health and Development, Reproductive Sciences Branch, Chronic Pelvic Pain Workshop, Bethesda, MD
79. "Nitric Oxide-Mediated Penile Erection: Neuroregulatory and Blood Flow-Dependent Mechanisms." April 27, 2002; Symposium V: The Molecular Basis of Erectile Physiology: From Bench to Bedside.

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80. "Nitric Oxide - Dependent Penile Erection: Neural Initiation, Endothelial Potentiation." April 29, 2002; Visiting Professorship, Medical College of Georgia, Augusta, GA
81. "Strategies for Recovering Cavemous Nerve Function after Radical Prostatectomy." April 30, 2002; Visiting Professorship, Medical College of Georgia, Augusta, GA
82. "Prostate Cancer: A Urologist's Perspective." June 8, 2002; American Cancer Society, Brevard County Men's Health Summit, West Melbourne, FL
83. "Functional Outcomes after Radical Prostatectomy." September 5, 2002; Istanbul American Hospital, Prostate Cancer Update. Istanbul, Turkey
84. "Management of Erectile Dysfunction after Radical Prostatectomy." September 5, 2002; Istanbul American Hospital, Prostate Cancer Update. Istanbul, Turkey
85. "Nitric Oxide Regulation of Penile Erection." September 12, 2002; Visiting Professorship, Missouri University, Columbia, MO
86. "Advances in the Management of Neurogenic Erectile Dysfunction: From Nerve-Sparing Radical Prostatectomy to Cavemous Nerve Regeneration." October 18, 2002; Visiting Professorship, Boston University, Boston, MA
87. "Neuroprotection and Nerve Grafts for the Treatment of Erectile Dysfunction." October 29, 2002; XXXIII World Congress of the International College of Surgeons, Taipei, Taiwan
88. "Male Sexual Function." December 16, 2002; Johns Hopkins Medical Institutions, Men's Health Symposium. Baltimore, MD
89. "Priapism Pathophysiology: Clues to Prevention." January 11, 2003; Sexual Medicine Society of North America, Inc., Fourth Annual Meeting, Boca Raton, FL
90. "Combined Panel: Sural Nerve Graft Reconstruction of the Cavemous Nerves at the Time of Prostatectomy: Implications for Preserving Erectile Function." January 12, 2003; American Society for Peripheral Nerve Annual Meeting, Kauai, HI
91. "Akt-Mediated eNOS Phosphorylation and Penile Erection." February 11, 2003; Gordon Research Conference on Nitric Oxide, Ventura, CA
92. "Vasoactive Pharmacotherapy for Erectile Dysfunction Enhances Penile Vascular Function." March 1, 2003; Japanese Society of Impotence Research, 13th Eastern Regional Meeting, Tokyo, Japan
93. "Neurophysiology of Erectile Function: Androgenic Effects." March 29, 2003; Postgraduate Course, American Society of Andrology 28th Annual Meeting, Phoenix, AZ
94. "Strategies to Prevent or Reverse Neural Trauma in the Prostatectomy Patient." April 26, 2003; CME Course, American Urological Association Annual Meeting, Chicago, IL
95. "The Phosphodiesterase-5 Inhibitors-Cialis." April 27, 2003; Sexual Medicine Society of North America, Inc. Meeting, American Urological Association Annual Meeting, Chicago, IL
96. "PDE-5 Inhibitors, Pharmacology of a New Class of Drugs" May 31, 2003; Sexual Dysfunction 2003, Columbia Presbyterian Medical Center, New York, NY

97. "Priapism." May 31, 2003; Sexual Dysfunction 2003, Columbia Presbyterian Medical Center, New York, NY
98. "The Impact of Viagra Over 5 Years: Why is it a Worldwide Phenomenon? Impact on Molecular Science and Sexual Health." June 30, 2003; Pfizer Symposium, 2nd International Consultation on Erectile and Sexual Dysfunction, Paris, France

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